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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/668,703	09/23/2003	Kenso Kanada	4041K-000146	2186

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EXAMINER

AFTERGUT, JEFF H

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 10/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/668,703

Applicant(s)

KANADA ET AL.

Examiner

Jeff H. Aftergut

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5-6-04, 9-23-03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent 62-252945 in view of either one of Attardi et al or Japanese Patent 3-81385 and Tarmuizu.

Japanese Patent '945 suggested that it was known at the time the invention was made to utilize a low melting point material which is an organic substance such as ethylene glycol-monophenyl ether, glycerol, cinnamyl alcohol, ethylene carbonate or ethylene diamine for securing a workpiece to a support for subsequent polishing of the workpiece. The reference taught that the adhesion technique involved the application of the organic substance in liquid form followed by securing with freezing and maintaining the assembly frozen during the machining operation. The reference failed to teach that the organic material was a paraffin or polyethylene glycol.

However, in the art of securing a workpiece to a support prior to the machining of the same, it was known at the time the invention was made to provide an organic material like polyethylene glycol which was hardened via freezing in order to attach the workpiece to the support prior to the machining operation as evidenced by either one of Attardi et al or Japanese Patent 3-81385. The references to either one of Attardi et al or Japanese Patent 3-81385 suggested that it was known at the time the invention was

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made to incorporate polyethylene glycol as the bonding agent for temporarily securing a workpiece to a support during the machining operation of the workpiece. More specifically, the reference to Attardi et al suggested that support material 3 which supported the drum blank (the workpiece) on a mandrel 1 prior to machining on a lathe wherein the support material 3 included waxes, paraffin and polyethylene glycol (as well as alcohols and amines), see column 3, lines 58-column 4, line 11. The reference made it clear that this material was cooled to solidify the same. Japanese Patent '385 suggested that those skilled in the art would have machined a contact lens subsequent to attachment of the lens to a support (the lens being the workpiece). The reference suggested that the workpiece was secured to the support with polyethylene glycol which was cooled and solidified prior to the machining operation, see the abstract of the reference. As one skilled in the art at the time the invention was made would have found that the use of polyethylene glycol as an alternative for the materials employed in Japanese Patent 62-252945, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize polyethylene glycol to secure the workpieces of Japanese Patent 62-252945 to the support prior to the machining operation as suggested by either one of Attardi et al or Japanese Patent 3-81385.

While the reference to Japanese Patent 62-252945 appears to suggest that the temperature of the assembly was maintained during the machining operation, there is no express evidence that such would have been performed by directing the cooling fluid against the surface in the manner claimed. However, during machining, it was known to direct cooling fluid against a surface to maintain the surface cold for attachment of the

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workpiece as suggested by Tarumizu. More specifically, Tarumizu suggested that those skilled in the art would have incorporated a fluid from a nozzle 7 which was directed at the workpiece to freeze the components to secure the workpiece to the support during the machining operation. Since the reference to Japanese Patent 62-252945 suggested that the temperature was maintained during the machining operation, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the techniques of Tarumizu to cool the assembly during processing wherein the binder employed to attach the workpiece to the support included polyethylene glycol as suggested by either one of Attardi et al or Japanese Patent 3-81385 in the process of Japanese Patent 62-252945.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff H. Aftergut whose telephone number is 571-272-1212. The examiner can normally be reached on Monday-Friday 7:15-345 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Dunn can be reached on 571-272-1171. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jeff H. Aftergut
Primary Examiner
Art Unit 1733

JHA
October 26, 2005